APQC EDUCATION NORTH STAR CASE STUDY

Montgomery County Public Schools



We had already embarked upon the process improvement journey before our partnership with APQC. With their help, though, our progress accelerated significantly.

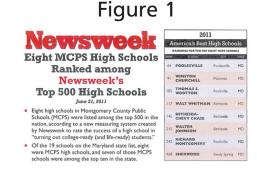
—Dr. Michael Perich, Montgomery County Public Schools

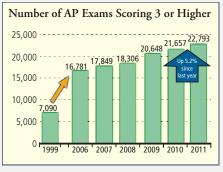
ABOUT MONTGOMERY COUNTY PUBLIC SCHOOLS

- > Strategic Goals:
 - Ensure Success for Every Student
 - Provide an Effective Instructional Program
 - Strengthen Productive Partnerships for Education
 - Create a Positive Work Environment in a Self-renewing Organization
 - Provide High-quality Business Services that Are Essential to the Educational Success of Students
- Largest school system in Maryland and the 16th largest school system in the U.S., with 200 schools, over 144,000 students and over 22,000 employees
- > The school system is diverse:
 - Students from 164 countries, speaking 184 different languages
 - 18,000 students in ESOL
 - 17,000 students with special needs
 - 37.2% White, 23.4% African American, 23.4% Hispanic, 15.7% Asian American, .3% American Indian
- > Awards and Achievements:
 - 2010 Malcolm Baldrige Award winner
 - 34 National Blue Ribbon Schools
 - 2011 graduation rate of 85.7%—Nation's best among larger schools
 - 60% of 2003 graduates obtained bachelor's degree or higher (national rate is 30.7%)—Based upon College Readiness Assessment for the Class of 2003
 - Montgomery County ranks as one of the nation's best (Figure 1)
 - AP participation and scores are on the rise (Figure 2)

THE SEVEN KEYS: "KEY" INDICATORS OF SUCCESS IN COLLEGE

The Seven Keys to College Readiness delineates the trajectory for student success that is set at advanced rather than proficient standards to make certain that results are not predictable for any groups and to ensure there are no limits to any student's level of achievement. Each key identifies important benchmarks to inform students' progress along an academic trajectory that will enable them to attain the knowledge and skills that are the foundation for success in postsecondary education. MCPS developed the Seven Keys in 2008 by looking backward from the goal of college readiness and linking successful attainment of one key with the likelihood of successful attainment of a subsequent key. The foundational research for the Seven Keys began with the final key and was back-mapped to show what students need to know and be able to do beginning in kindergarten. Scores of 1650 on the SAT or 24 on the ACT were set for Key 7 because students who attain these scores are unlikely to be required to take remedial coursework upon entry to college.











THE SEVEN KEYS ARE:

Key 1—Reading Above Grade Level in Grades K-2

- Kindergarten: Reading at text level 6 or higher
- Grade 2: TerraNova, second edition (TN/2) Reading at 70th NP or higher
- Key 2—Maryland School Assessment (MSA) Advanced Reading in Grades 3 to 8
- Key 3—Advanced Math in Grade 5
- Key 4—Algebra 1 with a C or higher by Grade 8
- Key 5—Algebra 2 with a C or higher by Grade 11
- Key 6—AP exam score of 3 or higher or IB exam score of 4 or higher by Grade 12
- Key 7—SAT combined score of 1650 or higher or ACT composite score of 24 or higher by Grade 12

MCPS has developed a rich data culture around each of the Seven Keys, focusing the entire educational community on raising performance for all students and narrowing achievement gaps on each of the keys. Data discussions occur centrally, at schools, and among professional learning communities, and are supported by M-Stat teams and professional development.

Montgomery County's Recommended *Things to Do*

- Have someone be the "bulldog" for process improvement
- Show me the data and investigate root cause
- Develop a strategic direction and ensure alignment
- Build staff capacity
- Download the Baldrige criteria and provide opportunities for personal and organizational growth and learning
- Get with APQC and begin your process performance and management journey as soon as possible
- Study your organization

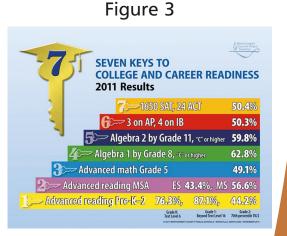
The Office of Shared Accountability developed monitoring tools based on research

that significantly correlates performance on three keys (4, 5, and 6) to College Readiness with the attainment of Key 7 (1650 on SAT or 24 on ACT). The M-STAT team put has helped schools strategically monitor Grade 11 and Grade 12 students by using the monitoring tool to prepare students to attain Key 7 and also help schools provide individualized academic support to students. The Office of School Performance monitors school progress in each of the keys using and the schools focus resources and efforts on specific keys through their Baldrige Guided School Improvement Planning processes. The Seven Keys were rolled out with a comprehensive parent education campaign as well, including a robust public website, to help parents understand the importance of college readiness from the time their children enter MCPS. The Department of Family and Community Partnerships continues to focus parent education on college readiness. Initially the keys were described as "aspirational" goals for students. This created confusion within the schools making the target vetting and alignment with the 7 Keys a critical project.

Three years after the Seven Keys were introduced the Office of Shared Accountability built on the foundational research for the Seven Keys by producing the first longitudinal study to examine more thoroughly the relationship between college readiness and post secondary educational outcomes for MCPS graduates. More rigorous multivariate statistical methods, including multiple regression, logistic regression, and structural equation modeling were used in this study. The study, College Readiness and Postsecondary Educational Outcomes for 2003 Graduates of Montgomery County Public Schools, validates Keys 4–7. Findings indicate that 2003 graduates who met the four secondary keys far outpaced their peers nationwide in college enrollment, persistence, and degree attainment.

Additional Results

- 1. Increases year over year, far outpacing both state and national averages (Figure 3).
- 2. Operational successes as well:
 - In-House copier repair program: cost savings of \$1.5 million per year
 - "Copy-Plus" program, saving 50,000 hours per year of planning and instructional time
 - Increase in work orders completed: 90% completed in 2009 (up from 85% in 2008)
 - Buses out of service goal: "No buses out of service for more than 24 hours." From 2004-2009, goal reached 100% of time





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